

TRANSITION-TIME CONTROL IN A HIGH-SPEED DATA TRANSMITTER

ABSTRACT OF THE DISCLOSURE

Transition time of a data signal is controlled by applying different delays to the data signal and combining the delayed data signals. The transition time of the data
5 output is determined by difference in delays applied to the data input and may be proportional to bit time of the bit clock. The data input may be applied directly to the delay elements or may be clocked by clock signals delayed by the delay elements. The delayed data is applied to parallel driver circuits. Supply voltage to the delay elements can be controlled to compensate for production and environmental variations. The
10 supply voltage controller includes parallel delay elements of different delays and a phase comparator, the output of which controls the supply voltage applied to the delay elements.